

First records of Herald Petrel *Pterodroma heraldica* and Bulwer's Petrel *Bulweria bulwerii* for Seychelles

David J. R. Andrews^a and Adrian Skerrett^b

Première mention du Pétrel hérault *Pterodroma heraldica* et du Pétrel de Bulwer *Bulweria bulwerii* pour les Seychelles. Un Pétrel hérault *Pterodroma heraldica* était présent à Cousin le 10–11 juin 2009 et un Pétrel de Bulwer *Bulweria bulwerii* le 15 juin 2009. Ces mentions ont été acceptées par le Comité d'Homologation Seychellois comme les premières pour le pays.

Herald Petrel

On 10 June 2009 at 15.12 hrs DJRA noticed a medium-sized *Pterodroma* petrel amongst Wedge-tailed Shearwaters *Puffinus pacificus* circling the hill at Cousin Island Nature Reserve, Seychelles. Aware of the complexity of identifying members of this genus to species level, he concentrated on obtaining as many and as good photographs of the bird as possible (Fig. 1). The bird made several passes of the hilltop before disappearing at 15.32 hrs. On returning to the research accommodation DJRA discovered that M. Hammers had also noted the *Pterodroma* from the forest below but had been unable to acquire reasonable views. An after-dark search failed to find the bird in question or any other petrels.

Next day DJRA returned to the hilltop at 16.30 hrs and within five minutes saw the bird briefly, flying past, but there was no further sign of it until 17.45 hrs, when an unknown call was



Figure 1. Herald Petrel / Pétrel hérault *Pterodroma heraldica*, Cousin, Seychelles, 10 June 2009 (David J. R. Andrews)

heard twice overhead which proved to be given by the petrel; a *meh-meh-meh-meh-meh-meh-meh-meh-meh-meh-meh*. Thirty minutes later, the call was heard again but from below the hill. Subsequently, DJRA discovered the bird perched on a rock in a semi-open area with ferns and boulders, and took a couple of photographs and a short video (Fig. 2). An attempt was made to catch the bird but it flew off.

DJRA returned after dark and found the bird in the same location, but below the same rock, and on this occasion it was captured, photographed and ringed, before being released where it had been found (Fig. 3). Presumably the same petrel was seen several days later in flight. The photographs and description were submitted to the Seychelles Bird Records Committee (SBRC).

Description

A medium-sized *Pterodroma* petrel. Underparts: pale whitish-grey belly, pale grey neck, white throat, face and lores, dark underwings except for the white skua-like flashes in the primaries and a pale leading edge to the inner wing.



Figure 2. Herald Petrel / Pétrel hérault *Pterodroma heraldica*, Cousin, Seychelles, 11 June 2009 (David J. R. Andrews)



Figure 3. Herald Petrel / Pétrel hérault *Pterodroma heraldica*, Cousin, Seychelles, 11 June 2009 (David J. R. Andrews)

Dark undertail-coverts and rectrices. Upperparts medium grey, the wings slightly darker than the body, neck and head. Bare parts: heavy black bill, legs pale pink with partially black feet, and eyes dark. Measurements: tarsus 34 mm, folded wing 286 mm, uppertail 115 mm, undertail 123 mm, head and bill 70.1 mm. Mass: 300 g.

Analysis by SBRC

All previous records of *Pterodroma* petrels accepted by SBRC referred to Kermadec Petrel *P. neglecta* seen on Cousin Island from August 2003 (Eikenaar & Skerrett 2006), including a breeding record in November 2009 (the most recent). Kermadec Petrel is very similar to the present species but can be eliminated using several features, notably: black primary shafts (white in Kermadec); extensive white feathering on the secondaries and coverts of the underwing forms a long, thin triangle from the base of primaries to the rear of the wing (underwing mainly black in Kermadec, white being confined to the basal two-thirds of the inner webs of the primaries); long wedge-shaped tail (rounded in Kermadec); and mass, tarsus and folded wing within range for Herald (low for Kermadec), and tail rather long for Herald, but much too long for Kermadec.

Trindade Petrel *P. arminjoniana* and Herald Petrel *P. heraldica* are very similar and the latter has often been considered as a Pacific race of *P. arminjoniana*, which is otherwise an Atlantic taxon. Imber (1985) and Sibley & Monroe (1990) elevated both to species rank, but subsequent authors did not generally follow this, including notably Sibley & Monroe (1993). Thereafter,

Brooke & Rowe (1996) argued for separate treatment on the basis of morphological and genetic differences. BirdLife International (2011) recognise separate species following Brooke (2004), who separated them on the basis of size (Murphy & Pennoyer 1952, Brooke & Rowe 1996) and different intestinal structure (Imber 1985). After examining specimens at the Natural History Museum, Tring, the SBRC accepted the record as a Herald Petrel on the basis of several features, most notably that even the darkest Herald has pale lores, whereas even the palest Trindade has dark lores.

Status and distribution

Herald Petrel breeds in the tropical Pacific from Raine Island, Australia, to Easter Island, in the western Indian Ocean on Round Island, Mauritius, and in the South Atlantic on Trindade and Martim Vaz, Brazil (Carboneras 1992). This is the first accepted record for Seychelles.

Bulwer's Petrel

On 15 June 2009, after dark, DJRA again climbed the hill on Cousin Island in search of the Herald Petrel he had found a few days earlier. He made his way to the hilltop, checking as many of the thousands of Wedge-tailed Shearwaters and fewer Audubon's Shearwaters *Puffinus lherminieri* as possible. At the bare granite summit, a smaller petrel was discovered sat in the open, partially wedged into a crease in the rock. It appeared



Figure 4. Bulwer's Petrel / Pétrel de Bulwer *Bulweria bulwerii*, Cousin, Seychelles, 15 June 2009 (David J. R. Andrews)



Figure 5–6. Bulwer's Petrel / Pétrel de Bulwer *Bulweria bulwerii*, Cousin, Seychelles, 15 June 2009 (David J. R. Andrews)

similar in size to Audubon's Shearwater. Picking the bird up, it appeared to be an all-dark petrel. DJRA then returned to the research house where it was measured, photographed and ringed, before being released at the spot where it was found (Figs. 4–6).

From what little literature was available at the time, the bird was tentatively identified as a Jouanin's Petrel *Bulweria fallax* based on its wedge-shaped tail, slightly paler secondary-coverts and what appeared to be heavier head and bill than Bulwer's Petrel *B. bulwerii*. The photographs and description were submitted to the SBRC, whose analysis revealed the bird to be a Bulwer's Petrel, a first record for the Seychelles.

Description

A medium-sized long-winged petrel, with a wedge-shaped tail. Underparts: all dark, with a small pale chin patch. Upperparts: all dark, with a slightly paler secondary-covert bar. Bare parts: deep-based black bill, legs dark blackish pink with black webs, and eyes dark. Measurements: tarsus 27.9 mm, wing-chord 216 mm, uppertail 111 mm, head and bill 50.4 mm, gape 13.5 mm. Mass: 124 g.

Analysis by SBRC

Records of all-dark petrels previously accepted by SBRC have referred to Jouanin's Petrel *Bulweria fallax* (11 Seychelles records prior to 1 January

2011), Swinhoe's Storm-petrel *Oceanodroma monorhis* (three records) and Matsudaira's Storm-petrel *O. matsudairae* (one record). Tail shape eliminated Swinhoe's and Matsudaira's Storm-petrels, and the all-dark Wedge-tailed Shearwater. Herald Petrel and Kermadec Petrels are markedly larger. Mascarene Petrel *Pseudobulweria aterrima*, which breeds only on Réunion, is a potential vagrant to Seychelles, but it has a rounded or square-ended tail. Jouanin's Petrel is endemic to the north-west Indian Ocean whilst Bulwer's Petrel breeds in tropical and subtropical Atlantic and Pacific waters, dispersing west into the Indian Ocean as far as the Maldives in December–early March (Carboneras 1992). Fiji Petrel *P. macgillivrayi* is very similar to Bulwer's Petrel, albeit a highly improbable vagrant, it being Critically Endangered, and is found only around Gau, in Fiji (Shirihai *et al.* 2009). It lacks a pale covert bar on the upperwing, unlike Bulwer's Petrel.

Bulwer's Petrel is markedly smaller than Jouanin's Petrel, has a smaller, less stout bill, usually shows a more contrasting pale upperwing-covert bar and has a 'smoothly' wedge-shaped tail (Jouanin's Petrel has projecting central tail feathers, thus possessing a noticeable 'step' in the profile of the wedge-shaped tail). The Cousin bird showed an almost indiscernible covert bar (Fig. 4), but its bill shape was commensurate

with Bulwer's Petrel (Fig. 5), whilst there was no evident 'step' to the wedge-shaped tail (Fig. 6). Measurements suggested that it was too small for Jouanin's Petrel, whereas the tail measurement lies in the middle of the range for Bulwer's Petrel, and tarsus, wing length and mass are all too small for Jouanin's Petrel, but fit Bulwer's Petrel (Cramp 1977, Brooke 2004, Luzardo *et al.* 2008).

Status and distribution

Bulwer's Petrel breeds in the Atlantic from the Azores to the Cape Verdes, and in the Pacific from east China and the Bonin Islands to Hawaii, Phoenix and the Marquesas. It is largely absent from its breeding grounds between October and March, and during this period Pacific breeders probably penetrate the Indian Ocean as far west as the Maldives (Carboneras 1992). This is the first accepted record for Seychelles.

Acknowledgements

Thanks are due to members of the SBRC for permission to release a summary of their analysis. In addition to AK, members who assessed this record were Michael Betts, John Bowler, Ian Bullock, David Fisher, John Phillips and Rob Lucking. Thanks are also due to Nature Seychelles for in-country support and accommodation during DJRA's field work.

References

BirdLife International. 2011. Species factsheet: *Pterodroma heraldica*. www.birdlife.org (accessed 10 November 2011).

Brooke, M. de L. 2004. *Albatrosses and Petrels across the World*. Oxford: Oxford University Press.

Brooke, M. de L. & Rowe, G. 1996. Behavioural and molecular evidence for specific status of light and dark morphs of the Herald Petrel *Pterodroma heraldica*. *Ibis* 138: 420–432.

Carboneras, C. 1992. Family Procellariidae (petrels and shearwaters). In del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) *Handbook of the Birds of the World*. Vol. 1. Barcelona: Lynx Edicions.

Cramp, S. (ed.) 1977. *The Birds of the Western Palearctic*. Vol. 1. Oxford: Oxford University Press.

Eikenaar, C. & Skerrett, A. 2006. First record of Kermadec Petrel *Pterodroma neglecta* for Seychelles. *Bull. ABC* 25: 88–90.

Imber, M. J. 1985. Origins, phylogeny and taxonomy of the gadfly petrels *Pterodroma* spp. *Ibis* 127: 197–229.

Luzardo, J., López-Darias, M., Suárez, V., Calabuig, P. & García, E. A. 2008. First breeding population of Bulwer's Petrel *Bulweria bulwerii* recorded on Gran Canaria (Canary Islands); population size and morphometric data. *Marine Ornithol.* 36: 159–162.

Murphy, R. C. & Pennoyer, J. M. 1952. Larger petrels of the genus *Pterodroma*. *Amer. Mus. Novit.* 1580: 1–43.

Shirihai, H., Pym, T., Kretzschmar, J., Moce, K., Taukei, A. & Watling, D. 2009. First observations of Fiji Petrel *Pseudobulweria macgillivrayi* at sea: off Gau Island, Fiji, in May 2009. *Bull. Br. Ornithol. Cl.* 129: 129–148.

Sibley, C. G. & Monroe, B. L. 1990. *Distribution and Taxonomy of Birds of the World*. New Haven, CT: Yale University Press.

Sibley, C. G. & Monroe, B. L. 1993. *A Supplement to Distribution and Taxonomy of Birds of the World*. New Haven, CT: Yale University Press.

^a E-mail: djr.andrews@googlemail.com

^b Seychelles Bird Records Committee, PO Box 336, Victoria, Seychelles, or Hazeley Brook, Keele Road, Keele, Staffs. ST5 5AL, UK. E-mail: sbrcresecretary@googlemail.com

Received 6 September 2011; revision accepted 17 November 2011.